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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,124

06/15/2006

Ho-Sik Rho

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EXAMINER

ZUCKER, PAUL A

ART UNIT

PAPER NUMBER

1621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/08/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/595,124

Applicant(s)

RHO ET AL.

Examiner

Paul A. Zucker

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/15/06, 2/27/06, 12/19/06.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it consists of more than one paragraph. Correction is required. See MPEP § 608.01(b).
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 3-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "R<sub>3</sub> is -(CH)-". This is an incomplete structural descriptor since there is an undefined substituent on the carbon atom. It is therefore impossible to determine the metes and bounds of the claim. Claim 1 and its dependents are therefore rendered indefinite.
4. Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3 and 4 recites the limitation "(b) Substituting an alkyl group for amide bond of benzamide formed in said step". It is

unclear what the product of this step is. It is therefore impossible to determine the metes and bounds of the claims. Claims 3 and 4 are therefore rendered indefinite.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Gadek et al (US 2002/0172967-A1 11-2002). Gadek discloses (Page 21, column 2, lines 5 and 7) compounds which correspond to those of instantly claimed Formula 1 in which  $R_1$  is 4-methylphenyl,  $n = 0$  or 1,  $R_4$  is a hydrogen atom. The Examiner considers any material containing the claimed compounds to meet the limitations of the composition claims since statements of intended use are given little weight in the determination of their patentability. Gadek therefore anticipates Claims 1, 2 and 5-7.
6. Claims 1, 2 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Breslow et al (US 5,700,811 12-1997). Breslow discloses (Column 24, lines 45-64) a compound which correspond to those of instantly claimed Formula 1 in which  $R_1$  is phenyl,  $n = 0$ ,  $R_4$  is a hydrogen atom. The Examiner considers any material containing the claimed compounds to meet the limitations of the composition claims since statements of intended use are given little weight in the determination of their patentability. Gadek therefore anticipates Claims 1, 2 and 5-7.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gadek et al (US 2002/0172967-A1 11-2002).

Instantly claimed are compounds of Formula 1 in which the hydroxamic acid may have up to a single methylene between it and the central aromatic ring.

Gadek teaches (Page 21, column 2, line 9) a compound which corresponds to a homolog of those of instantly claimed Formula 1 in which R<sub>1</sub> is 4-methylphenyl, n= 2, R<sub>4</sub> is a hydrogen atom. Gadek teaches (Paragraph [0143]) that these compounds have utility as drug lead compounds. The Examiner considers any material containing the claimed compounds to meet the limitations of the composition claims

since statements of intended use are given little weight in the determination of their patentability.

The difference between the compound of Gadek and those instantly claimed is that that taught by Gadek has two methylene groups between the aromatic ring and attached hydroxamic acid group while those instantly claimed have a single methylene group between the aromatic ring and attached hydroxamic acid group.

One of ordinary skill in the art, however, would have been motivated to modify the compound of Gadek to make the lower adjacent homologue in the expectation that it would exhibit properties similar to those taught by Gadek. There would have been a reasonable expectation for success based on the expectation that adjacent homologues can be expected to have similar properties. In addition the teaching of Gadek establishes their equivalence.

Thus the instantly claimed compounds and compositions would have been obvious to one of ordinary skill in the art.

8. Claims 1, 2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuneshi et al (JP 10-182583 07-1998, machine translation).

Instantly claimed are compounds of Formula 1 in which the hydroxamic acid may have up to a single methylene between it and the central aromatic ring.

Tsuneshi teaches (Paragraph [0031], compound 49) a compound which corresponds to a homolog of those of instantly claimed Formula 1 in which  $R_1$  is phenyl,  $n = 2$ ,  $R_4$  is a hydrogen atom. Tsuneshi teaches (Paragraph [0082]) use of compositions of these compounds for treatment of cancer cells. The Examiner considers any material containing the claimed compounds to meet the limitations of the composition claims since statements of intended use are given little weight in the determination of their patentability.

The difference between the compound of Tsuneshi and those instantly claimed is that that taught by Tsuneshi has two methylene groups between the aromatic ring and attached hydroxamic acid group while those instantly claimed have a single methylene group between the aromatic ring and attached hydroxamic acid group.

One of ordinary skill in the art, however, would have been motivated to modify the compound of Tsuneshi to make the lower adjacent homologue in the expectation that it would exhibit properties similar to those taught by Tsuneshi. There would have been a reasonable expectation for success based on the expectation that adjacent homologues can be expected to have similar properties.

Thus the instantly claimed compounds and compositions would have been obvious to one of ordinary skill in the art.

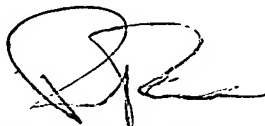
### ***Conclusion***

9. Claims 1-7 are pending. Claims 1-7 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Zucker whose telephone number is 571-272-0650. The examiner can normally be reached on Monday-Friday 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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